

Application No.: 09/849,530

Docket No.: 20136-00344-US

AMENDMENTS TO THE CLAIMS

Claims 1-14 and 31 are canceled. Claims 15, 28, 29, and 30 are currently amended.

1-14 (canceled)

15. (currently amended) A process for fabricating a semiconductor structure which comprises [the steps of] providing a germanium-containing layer of at least one member selected from the group consisting of copper germanide, germanium oxide, germanium nitride and combinations thereof onto at least one surface of a copper member; and providing a layer of a material that [does not adhere well] is poorly adherent to copper on the germanium-containing layer.

16. (original) The process of claim 15 which comprises providing a germanium-containing layer by selectively forming copper germanide on the copper member by flowing germane over the structure.

17. (original) The process of claim 16 wherein the germane is at a temperature of about 200 to about 450°C.

18. (original) The process of claim 16 which comprises providing a gaseous composition containing about 0.05 to about 5% of germane and a second gas selected from the group consisting of nitrogen, helium, argon, and mixtures thereof.

19. (original) The process of claim 15 wherein the germanium-containing layer is provided by providing a layer of copper germanide on the copper and then oxidizing all or a portion of the copper germanide to provide a layer of germanium oxide.

20. (original) The process of claim 15 wherein the thickness of the germanium-containing layer is about 100 to about 1000 Å.

21. (original) The process of claim 15 wherein the thickness of the germanium-containing layer is about 150 to about 400 Å.

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22. (original) The process of claim 19 wherein the layer of copper germanide is about 100 to about 1000 Å and the layer of germanium oxide is about 100 to about 1000 Å.

23. (original) The process of claim 15 wherein the germanium-containing layer comprises providing a layer of copper germanide and then nitriding all or a portion of the copper germanide layer to provide germanium nitride.

24. (original) The process of claim 23 wherein the copper germanide layer is about 100 to about 1000 Å thick and the germanium nitride layer is about 100 to about 1000 Å thick.

25. (original) The process of claim 15 wherein the germanium-containing layer is provided by providing a layer of copper germanide on the copper, then oxidizing all or a portion of the copper germanide to provide a layer of germanium oxide, and then nitriding a portion of the copper oxide layer to provide germanium nitride.

26. (original) The process of claim 15 wherein the copper member is copper or a copper alloy.

27. (original) The process of claim 15 wherein the copper member is about 1000 to about 20,000 Å thick.

28. (currently amended) The process of claim [15] 29 wherein the layer of silicon nitride is about 100 to about 200000 Å thick.

29. (currently amended) The process of claim 15 wherein the material that is [does not adhere well] poorly adherent to copper is silicon nitride.

30. (currently amended) The process of claim 15 wherein the material that is [does not adhere well] poorly adherent to copper is silicon dioxide.

31. (canceled)